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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CALLAHAN, PAUL E	

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/226,577	CHANEY	
	Examiner	Art Unit	
	Paul Callahan	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8 and 10-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8 and 10-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on has been entered.

2. Claims 1, 3-8, and 10-14 are pending in this application and have been examined.

Response to Arguments

3. Applicant's arguments filed 5-21-2005 have been fully considered but they are not persuasive.

The Applicant argues that the Berson '685 reference represents non-analogous art to the instant invention and therefore its use in the rejections of the claims in inappropriate. The Examiner counters that Berson was used to teach the features associated with protection of a data signal from illicit use and therefore meets the standard posited by the Court in *In Re Oetiker*, 977 F.2d 1443, 24 USPQ2nd 1443 (Fed. Cir. 1992) where a particular art reference must be either in the field of the Applicant's endeavor, or, if not, then be reasonably pertinent to the particular problem with which the Applicant was concerned.

The Applicant asserts that the Berson reference fails to teach transmission of a scrambled signal and a data signal to a receiver. Yet a careful reading of Berson reveals that such is indeed

taught by Berson by virtue of the step of Berson wherein encrypted data Ei[M] and an encoded decryption key X[Di] are transmitted to printer module (fig. 1 item 28) which does constitute a receiver for the information.

The Applicant presents the new argument that "Third, despite the Examiner's statement (quoted above), there is no disclosure or suggestion in Berson that encrypted data Ei[M] and an encoded decryption key X[Di] are even transmitted to item 28" In response to this the Examiner notes that Berson mistakenly references the printer, item 28 in fig. 1, as item 20 in col. 1 lines 50-55. Despite this typographical error, it is cleat that item 28 "Printer" is being referenced by virtue of it being referred to as a "Printer" and its functionality described as production ("Printing") of an identification card.

In response to applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate these features of Berson into the system of Girod. Including the frequency-spreading signal with the transmitted data of Berson would facilitate rapid recovery of the watermark signal. Girod discusses the motive for such a combination in col. 1 lines 50-60 where the need for rapid signal processing is discussed.

The Applicant asserts that incorporation of the frequency spreading signal with the transmitted, watermarked data of Berson would represent a modification of the principle of operation of Berson. Yet the Girod reference was used as the primary reference in this case, and Berson used only to teach the principle of subsequent incorporation of a quantity useful to extract information from scrambled data along with transmitted scrambled data.

The Applicant's assertion that the combination of Girod and Berson fails to teach combining of the scrambled signal with a data signal as found in claim 3 is countered by reference to col. 9 of Berson.

The Applicant's assertion that the combination of Girod and Berson fails to teach descrambling the scrambled signal to recover the copy protected signal as found in claim 6 is countered by noting that such is taught by Girod in col. 5 lines 7-10 where reversal of the watermarking process is discussed.

The Applicant's assertion that the combination of Girod and Berson fails to teach reconversion of a recovered copy signal back into a coded signal using an inverse copy function as found in claim 6. Yet such is indeed taught by Berson in col. 5 line 49 through col. 6 line 17 where the recovered text data in col. 5 line 53-56 is reencrypted by a reverse of the decryption process. The Berson reference teaches the use of a private key to digitally sign data previously encrypted under a corresponding public key and decrypted with that private key under an RSA protocol as described in col. 1.

The Applicant's assertion that the combination of Girod and Berson fails to teach combining the encrypted data and other data into a combined signal for transmission as found in claim 11 is countered by noting that such is indeed taught by Berson as discussed supra where

encrypted data Ei[M] and an encoded decryption key X[Di] are transmitted associated with each other to printer module (fig. 1 item 28).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> ***(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.***

5. Claims 1, 3-8, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girod et al. in view of Berson et al. (5742685).

As for claim 1, In their abstract, Girod et al. teach watermarking a compressed signal. In figure 1, the lower input is a digital signal, which is compressed by element 10 (see lines 47-62 of column 3 and line 60 of column 4 through line 21 of column 5 for a description of figure 1), thereby reading on clause a) of the claims. Element 26 watermarks the compressed signal; the watermark is inserted using a frequency spreading signal, which meets applicant's data signal representing copy protection data, while the watermarking operations read on the copy protection function. In the abstract, Girod et al. say that encryption/decryption capabilities can be included but does not specify how or where. Claim 8 and figure 4 make it clear that encryption is applied after compression and watermarking. Encryption is a type of scrambling and so clause c) is met. The reversal of these steps is implied by figures 1 and 2c. While Girod et al. specifically disclose decoding preceding removal of the watermark; these steps are interchangeable, as is understood

from lines 7-10 of column 5. This is part of the benefit of Girod et al.'s watermarking method. As described at the top of column 9, removal of the watermark requires the sequence that was used to embed the watermark. Girod et al. do not indicate how the receiver acquires the sequence. In lines 9-12 of column 4, Berson et al. teach appending a decryption key to a cryptogram in order to facilitate recovery of the encrypted information. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to facilitate removal of the watermark in Girod et al. by including the frequency spreading signal with the transmitted data as taught by Berson et al.

Berson teaches transmission of a scrambled signal and a data signal to a receiver for subsequent recovery of said scrambled signal in fig. 1 item 28 where encrypted data Ei[M] and an encoded decryption key X[Di] are transmitted to a printer module which constitutes a receiver for the information.

The cited section of Berson et al renders claims 3 and 4 obvious. The elements of claims 5 and 6 are rendered obvious by the steps described by Girod et al.

The steps of claim 7 are met for reasons similar to claim 5. Claims 8 and 10-14 are a system for the method of claims 1 and 3-7 and are rejected for the same reasons.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent documents teach systems of data protection similar to that of the Applicant's invention.

Rhoads 5,636,292

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 272-8300

8/3/05

Paul Callahan